

PLANNING REPORT

MAD RIVER DAM AND RESERVOIR  
MAD RIVER  
CONNECTICUT RIVER BASIN  
CONNECTICUT

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## SUMMARY

1. Description. - Mad River Dam will be located on Mad River in the Town of Winchester, Connecticut, about 2.2 miles above its confluence with the Still River and about 0.3 mile upstream from the limits of the city of Winsted, Conn. The project provides for a rolled earth dam with a maximum height of 168 feet and two earth dikes with a maximum height of 51 feet. The reservoir will have a storage capacity of 9,630 acre-feet, all reserved for flood control, equivalent to 10.0 inches of runoff from the tributary drainage area of 18.2 square miles. Planning has been initiated (1 January 1960).

2. Federal Cost Estimate (July 1959)

	<u>Estimate</u>
Construction	\$3,986,000
Lands (local interests)	-
Relocations	1,037,000
Preauthorization Studies (Completed)	18,000
Engineering and Design	483,000
Supervision and Administration	<u>446,000</u>
Total	\$5,970,000

(The total estimate, July 1959, includes \$835,000 for contingencies).

3. Funds

Appropriations to date	\$ 286,000
Balance to complete	<u>5,684,000</u>
Total estimated cost	\$5,970,000

4. Benefit-cost ratio. - 1.6 to 1, applicable to project as a single unit in the Mad, Still, and Farmington River watersheds. There are no other authorized reservoir projects in these watersheds.

5. Status of Local Cooperation. - Under authorizing legislation (1958 F.C. Act), local interests are required to furnish all lands and rights-of-way necessary for construction and operation of the project and to maintain the project after completion. The State Legislature has authorized funds for this purpose.

6. Applicability of Provisions of Continuing Authorization Acts to the Project. - Not applicable.

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## A. AUTHORIZATION

1. The Mad River Reservoir project provides for the construction of a flood control dam on the Mad River above Winsted, Connecticut. Authorization for the project is as follows:

<u>Act and Document</u>	<u>Work Authorized</u>	<u>Estimated Federal Cost</u>
1958 Flood Control Act H.D. 137, 85th Congress	Dam and reservoir for flood control purposes	<u>\$5,430,000</u>
Total of authorization estimates		\$5,430,000

2. Full monetary authorization for the project was provided in the Act authorizing the project.

## B. LOCATION AND DESCRIPTION

3. Mad River Dam will be located on the Mad River about 2.2 miles above its confluence with the Still River and about 0.3 mile upstream from the limits of the city of Winsted. The project provides for construction of a rolled earth dam across the Mad River, two earth dikes across saddles northwest of the dam, and a concrete side-channel spillway in the north abutment of the dam, as shown on the project map bound at the end of this report. The reservoir at spillway crest will extend upstream about 1.8 miles and cover approximately 196 acres lying entirely within the town of Winchester, Connecticut. The project will provide a high degree of protection for the city of Winsted.

### 4. Pertinent Data (Preliminary)

#### a. Earth Embankments

	<u>Dam</u>	<u>Dike No. 1</u>	<u>Dike No. 2</u>
(1) Top elevation, ft. m.s.l.	988	988	988
(2) Length, ft.	1,040	750	1,350
(3) Maximum height, ft.	168	25	50

#### b. Spillway

(1) Crest elevation, ft. m.s.l.	973
(2) Length, ft.	250
(3) Maximum surcharge, ft.	12

c. Reservoir

(1)	Flood control storage, ac.-ft.	9,630
(2)	" " " inches	10.0
(3)	Tributary drainage area, sq. mi.	18.2

C. FEDERAL COST ESTIMATE (July 1959)

5. Construction

<u>Features</u>	<u>Present Estimate</u>
Reservoir	\$ 4,000
Dam	3,969,000
Road	<u>13,000</u>
Total Construction	\$3,986,000

(The total estimate for construction, July 1959, includes \$665,000 for contingencies).

6. Lands. - Responsibility of local interests - See Section F.

7. Relocations

<u>Feature</u>	<u>Present Mileage</u>	<u>Relocated Mileage</u>	<u>Present Estimate</u>
<u>Highway</u>			
U.S. Hwy. 44 (incl. utilities)	2.2	2.3	\$1,037,000

(The total estimate for relocations, July 1959, includes \$170,000 for contingencies).

8. <u>Preauthorization Studies (Completed)</u>	\$ 18,000
9. <u>Engineering and Design</u>	483,000
10. <u>Supervision and Administration</u>	446,000